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(54) Title: SCANNING OF ELECTROMAGNETIC BEAMS

## (57) Abstract

A magnetic device (10) is provided for scanning a beam (12) of microwave radiation. The device (10) has a magnetisable body (14) having an aperture and an axis (24) perpendicular to the aperture. A plurality of coils (30, 32) located on sides of the body (14) produce a gradient in magnetisation in the body (14) which is rotated about the axis (24) by varying current carried by the coils. Interaction between the beam (12) and the magnetised material of the body (14) causes the beam to be offset from and steered about the axis (24). A conical mirror placed above and facing the aperture causes the beam (12) to be scanned through 360°.

